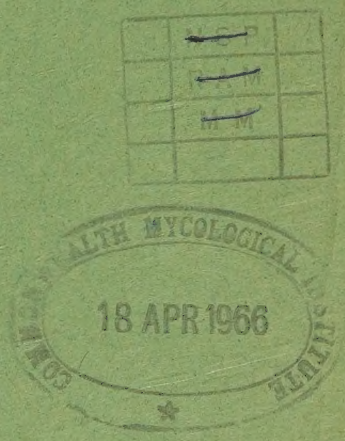
NORTHERN NIGERIA

Annual Report

of the

Ministry of Agriculture Northern Nigeria

1963-64



PRINTED BY THE GOVERNMENT PRINTER, KADUNA

Annual Report of the Ministry of Agriculture of Northern Nigeria 1963-1964

Digitized by the Internet Archive
in 2025

https://archive.org/details/annual-report-forest-administration-of-northern-nigeria_1963-1964

INTRODUCTION

The last Annual Report of the Ministry of Agriculture covered the period of the financial year 1962-63. This Report covers the following year from the 1st April, 1963 to the 31st March, 1964. In 1965, it is the policy of the Ministry to produce a triennial report for the period 1962 to 1965.

2. The Ministry of Agriculture in all the Divisions expanded its activities in spite of a continuous shortage of trained personnel. The emphasis continues on the provision of an improved living standard for the increasing population, whilst at the same time conserving and improving the Agricultural Resources of the North. The most significant change in the past year has been the establishment of the first of the series of Farm Institutes whereby the ex-primary school leaver is to be taught modern methods of farming before returning to his own area; there to set up and run his own farm with financial assistance and advice from the Ministry, the Ministry of Social Welfare and Co-operatives and his parent Native Authority.

FIELD SERVICES DIVISION

3. The staff situation still remains acute, recruitment not keeping pace with retirements and resignations. Junior staff are being recruited but many are still undergoing training and so are not available to take their place in the field.

4. In most parts of the Region the rains started a little later than normal, delaying early plantings, but once started the distribution was even and crops established well. Purchases of the main export crops, cotton and groundnuts, fell below the record level of those of the previous year mainly due to adverse weather conditions. By the end of March, 1964, 776,151 tons of groundnuts had been purchased compared with 854,092 for 1963. 120,847 tons of seed cotton was also bought as against 132,545 tons for the previous year.

Improved Seed Multiplication Schemes

5. The multiplication and distribution of improved seeds of various crops continued in many parts of the Region. Government and Native Authority farms as well as private farmers' land were used to varying degrees for this purpose.

6. Two guineacorn varieties, KYG. 5760-10-3 and SFF. 60 were recommended for a number of areas: the first of these is gradually replacing KYG. 60 in Bornu, Kano, Northern Katsina, Sokoto, Bauchi and Southern Niger, whilst SFF. 60 remained suitable for Northern Niger (Zuru and Kontagora), Southern Katsina and parts of Sardauna Province.

7. Rice seed multiplication schemes operated in all Provinces except Kabba and Zaria. Stages II and III of 8 different varieties were multiplied at Edozhigi and Badeggi respectively, 16 acres of each. Seed was distributed to all Provinces except Kano. The small multiplication scheme at Tomas run by Kano Native

Authority failed due to flood damage. At Birnin Kebbi Rice Multiplication Scheme, 3 varieties were grown on 54½ acres yielding 43,600 lb., paddy for distribution in 1964. BG. 79 was multiplied in Bauchi, Sardauna, Benue, (Katsina Ala, Wukari and Idoma), Katsina, Daura and Bornu (Jere and Gajibo). MAS 2401 was multiplied at Duku Rice Scheme in Ilorin Province, and D. 99 in Lowland Division of Plateau Province to replace the lower yielding and disease susceptible GEB. 24

8. Groundnut varieties recommended for various parts of the Region were S. 61, S. 38, MK. 374, MK. 383, K. 50 and TS. 28-204. The Northern Nigerian Marketing Board continued to provide assistance with finance for multiplication of groundnut varieties. 305 tons of seed mainly of S. 61 stock was distributed for planting under the K. 50 scheme in Kano. About 180 tons of Stage III seed was bought in 1964. S. 61 was also multiplied in parts of Bornu and Northern Katsina, DS. 569 in Daura and MK. 374 in Kontagora, Lowland and Pankshin Divisions. Other recommended varieties grown during the year to supply more seed for planting were T. 280204 in Benue, DS. 5418 in parts of Bornu and MK. 383 in Sokoto Provinces. Satisfactory yields were obtained.

9. Soya beans and benniseed continued to be multiplied and distributed in Niger and Benue Provinces. 42 and 60 acres of Malayan variety of soya beans were grown in Niger and Benue Provinces and 3½ tons and 6 tons, respectively were produced. Some 80 acres of Yandev 55 benniseed were grown in Niger and Benue Provinces yielding a total of 6 tons for distribution in 1964.

10. Irish potato multiplication work was held up because of the 'Late Blight' disease problem. Direct importation from Holland of disease tolerant Pimpernell variety was carried out. A total of 37½ tons seed was imported jointly by the Ministry and Jos and Pankshin Native Authorities and distributed to potato farmers in Jos and Pankshin Divisions at subsidised rates.

11. Cotton seed multiplication schemes continued at Daudawa and Gombe during the year. 20 acres of Stage B cotton at Daudawa yielded a total of 13.8 tons seed cotton and 326.1 acres of Stage C yielded 137.2 tons seed cotton with 8.8 tons and 88.8 tons seed, respectively. At Ako District in Gombe Emirate and Gwana District of Bauchi Emirate a total of 285 tons dressed seed was planted and yielded 3,153 tons of seed cotton.

12. MEXICO 5, ESI, and Sicaragua maize varieties were grown for subsequent distribution and sale to farmers at a number of centres including Daudawa and Ilorin, Bida and Southern Zaria.

13. 1,095 lbs of various legume grains were distributed to farmers in Ilorin Province for planting.

Tree Crops

14. Efforts to develop economic tree crops in the Riverain Provinces continued. Planting material was supplied to farmers at subsidised rates, and extension work to ensure successful establishment and tending of the trees planted was intensified.

15. 200,000 oil palm seeds were purchased from the Nigerian Oil Palm Research Institute, Benin, germinated at the Lokoja electric germinator and distributed for planting in Niger, Ilorin, Benue, Plateau, Kabba, Sardauna, Adamawa and Southern Zaria. Germination was about 80 per cent. Cocoa seed was, as usual, obtained from the Nigerian Institute for Cocoa Research, Ibadan, 5,025 pods were distributed to all the above provinces except Plateau and Adamawa. The same provinces received and planted a total of 42,750 kola seeds obtained from selected high yielding trees at Labozhi. About 60 lbs seed of Robusta Coffee was planted in Sardauna, Kabba, Niger, Zaria and Ilorin Provinces where a limited number of areas were suitable. Seed of Arabica Coffee which is suitable for the Mambilla Plateau only, is multiplied and distributed locally.

16. Demonstration kola groves were established in Niger, Ilorin, Kabba, Benue and Zaria provinces. It is yet too early to say much about the success of these groves but indications are favourable. Side by side with these demonstrations farmers were being encouraged to establish their own compound and field plantings.

Capsid Control

17. Those pests of cocoa which do considerable damage to the cocoa crop by lowering yields and killing off trees, are of several known species, the commonest being the '*Sahlbergella singularis*' or brown capsid. In the last report, it was stated that about 16,000 acres were double-sprayed in the 3 years, 1960-62, of operation. Hitherto Gammalin 20 was used but in 1963 Aldrex 40 was substituted as being more economic. Spot spraying of infested farms was carried out instead of the previous "blanket" method; a total of some 2,000 acres was treated. During 1964 a return to Gammalin 20 will be made on the advice of a Conference on Cocoa Mirids held at the Nigerian Institute for Cocoa Research headquarters Ibadan, when it was noted that continuous use of Aldrex 40 would cause a gradual build up of minor pests.

Fertiliser Campaign

18. The Ministry continued to emphasise the importance of applying artificial fertilisers to farmlands. This was intensified by field demonstrations resulting in increased use of Superphosphate and Sulphate of Ammonia by farmers. Farmers use superphosphate mainly on groundnut and cotton farms whilst Sulphate of Ammonia is applied chiefly to yams, sugar cane, rice and maize. Demand has increased heavily and, in a few cases, exceeded supply. 4,110 tons of Superphosphate and 1,570 tons Sulphate of Ammonia were sold in the Provinces in 1963 compared with 3,000 tons and 1,000 tons, respectively in the previous year.

Mechanisation

19. Demand for mechanical cultivation of upland farms using Ministry equipment and management staff expanded appreciably under the subsidy schemes.

All Provinces except Plateau, Kabba and Ilorin had a Tractor Hiring Unit for upland cultivations. It is planned to start pilot projects in the remaining Provinces to complete the establishment of this service all over the Region. The total acreage cultivated in 1963 was 2,394 compared with 1,480 in 1962 and 760 in 1961. The subsidy was reduced from 75 per cent in 1961 to 50 per cent in 1962 and 1963.

20. Mechanical cultivation for rice continued at the full economic cost of £3-£4 per acre. More land was cultivated under the Ministry as well as Native Authority schemes in Adamawa, Benue, Bornu and Niger Provinces compared with previous years. Acreages cultivated on irrigated wheat projects in Sokoto, Kano and Bornu Provinces in this their third year of operation were increased. A total of 2,787 acres was cultivated in 1963 compared with 1,562 acres in 1962. Subsidies for tractor cultivations and water rates continued.

21. The United States Agency for International Development has been assisting the Ministry to develop simple farm implements and machinery suitable for work on soils and in conditions to be met in the main ecological zones of the Region. The three Agricultural Engineers are based at Maiduguri in the Sudan Zone and Daudawa in Northern Guinea Zone and at Bida in the Southern Guinea Zone. The Engineer for Daudawa has not yet been recruited.

Quelea Bird Control

22. The Bird Control Unit in Bornu Province continued its operations against Quelea birds. A total of 718 acres was sprayed with 1,125 gallons of parathion, killing an estimated 48,500,000 birds during the first half of the year. After an unfortunate accident involving the pilot of the aircraft the unit reverted to petrol bombing. A total of forty-seven bombings were carried out in Bornu, Dikwa and Adamawa, killing some 80,000,000 birds. The effect was shown in the better grain harvests in the areas concerned.

Mixed Farming

23. The development of new ox-drawn implements continued with field tests to determine their suitability for various conditions. The Ministry decided to augment the mixed farming loans usually given to mixed farmers and £51,000 was released to Native Authorities in the mixed farming provinces as a revolving loan for the purchase of equipment. The estimated number of mixed farmers has increased from 20,000 in 1962 to about 36,000 in 1963.

Lake Chad Fishing

24. The departure of the F.A.O. Master Fisherman in April 1963 left a blank which was not resolved until an indigenous Assistant Fisheries Superintendent returned from a course in Japan in July.

25. Because of the inaccessibility of Baga, the centre for extension work on the Lake was temporarily shifted to Mallam Fatori, some 50 miles further North. A Cosely house, a rest house, office, 2 Junior Staff quarters and a block of houses for Fisheries Assistants were constructed there.

Oil palm tree nursery at Agaie

Some Parliamentarians from Tiv Division at Farm Centre nursery in Yandev

Staff of the Ministry mending fishing nets at Malam Fatori at Lake Chad

A local fisherman with his haul of 4-foot-long 'Dan Sarki' weighing 25 lb at Malam Fatori

26. Bornu Native Authority Loans Scheme for equipping suitable fishermen continued to expand but owing to the shortage of senior staff no more fishermen could be trained and therefore full use could not be made of the complete loan provision. 149 issues were made and 30 extra sets were purchased, leaving a balance under the provision at £635. Repayments were satisfactory.

27. Efforts to form Co-operative Societies made little progress.

28. Salt cured fish and improved banda continued to be produced. All schools in Maiduguri had regular supplies of salt cured fish but local fishermen were not keen on this because they preferred to sell fresh fish for quick cash payment. Improved banda has been widely tested and found acceptable although poor in keeping quality. Further suitable markets for both salt cured fish and improved banda are being investigated.

Pond Fishing—Panyam

29. The Fish farmer retired at the beginning of the year, The Assistant Fish Farmer took over the station and remained in-charge throughout the year.

30. During the first half of the year activities centred mainly on stocking paddocks and dams with either Niger Perch, Lates niloticus or Carp fingerlings. Test fishing of these paddocks and dams and the related biometric tests were also carried out.

31. It is planned to stock suitable ponds in Katsina, Zaria, Bauchi, Benue, Niger and Sardauna Provinces, and to this end successful training courses were held for Government and Native Authority staff.

Mines Land Reclamation Unit

32. A total of 269 acres was reclaimed during the year whilst the area being worked amounted to 66 acres. 288.53 acres were ripped ready for the planting of eucalyptus trees. Owing to difficulties in obtaining land for reclamation the order for 360,000 eucalyptus seedlings was reduced to 200,000. In all about 184,000 eucalyptus seedling were planted.

33. Action was initiated with the assistance of the Provincial Administration regarding the responsibility for reclaimed areas under eucalyptus. Also outbreaks of fire during the 1962 dry season called for a review of policy to ensure plantation protection.

Assistance to improved Farming

34. This programme includes Minor Irrigation Schemes, Pilot extension Projects and Demonstration Plots which were carried out during the year.

(*a*) Minor Irrigation Schemes of varying sizes were carried out during the dry season in all provinces with the use of Pegson and Dando pumps as well as local shadoofs;

(*b*) The Pilot Extension Projects commenced in Sokoto and Bauchi Provinces and with the assistance of USAID Extension Technicians and Nigerian counterpart personnel progressed through the year satisfactorily. The main objective is to demonstrate the organisation and operation of an agricultural extension service to help accelerate agricultural production, rural development and improved living standards of the people. In East Sokoto from the base at Gusau, a start was made with Maru, Anka and Kotorkoshi districts, whilst in Bauchi a start was made later in the year at Gombe, the remaining period being spent in establishing and equipping an office and assembling technical agricultural information for printing in leaflet and poster forms for the use of extension workers. Plans were made to expand the projects to cover more districts in order to increase the scope of the new extension techniques in the two provinces. It was also agreed that other provinces should endeavour to adopt as much as possible of the techniques developed in the pilot areas into their own programmes. The particular technique item for major consideration being the 'package' approach whereby all the factors of production such as improved seed, fertilisers, seed dressings and improved husbandary practices are considered together. Another method of approach was to involve the local people in planning and executing programmes. Responses from the Native Authorities and especially the farmers themselves are very encouraging.

(*c*) *Demonstration Plots.*—Selected farmers amongst the populace were encouraged with free supplies to carry out all the 2,100 demonstrations themselves under the supervision and with the help of the trained extension staff. Successful demonstrations were used to teach other farmers new farming techniques. The programmes covered the main food and cash crops.

Soil and Water Conservation

35. Work on soil and water conservation continued without major changes due to shortage of trained personnel.

36. *Katsina Province.*—Except for contour bunding and provision of water courses at Kadandani village, east of the Kano-Katsina road, no further work was undertaken at Kadandani. 1927 acres were treated with water courses demarcated and sown to grass at an average cost of 8*s* per acre. The arrival of a USAID Soil Conservationist is awaited to advise on the treatment of the "hurmi" areas in the South of the village area.

37. At Kwangwalam a further 361 acres was protected with "alyara" (Euphorbia balsamifara) and trees. About 2,500 neem trees were planted with paid labour with a 50 per cent take.

38. Work at Mairuwa and Funtua Gully was begun with the construction of graded bunds as on the original Funtua Gully Scheme. A total of 100 acres, approximately, was treated. Contour ridging of farms included in the Funtua Gully Scheme was carried out by the Tractor Hire Unit and paid for by the farmers.

39. *Kano Province.*—In Northern Gumel at Jeke about 9 acres was planted with 7,700 neem trees to protect 97 acres in a trial shelter belt. The cost of this came to £92 for fertilisers, insecticides and labour. The area was temporarily fenced with barbed wire. Approximately 450 acres at Ba Maina Land Use area in Birnin Kudu District were contour-bunded and part contour-ridged.

40. *Sardauna Province.*—At Mubi and Micika Soil Conservation Schemes 1,500 acres were protected at an average cost of 12*s* per acre using tractor bunding and stone walls erected by hand labour. This stood up well against the excessive rains in August and September. 170 acres of cashew plantation were established on the lower slopes of the hills surrounding the protected areas. The protective bund at Lamurde, South-East of Mubi town, successfully diverted running water from flooding Mubi town.

41. *Plateau Province.*—At Jal in Ganawari District the soil rehabilitation scheme proved successful despite three accidental bush fires which occurred in the dry season, the stylosanthes recovering very well. A further 8,000 eucalyptus trees were planted and farmers reaped excellent "acha" and "dauro" crops on land which was previously completely worn-out. This was due to the integration of settled cattle owners with local arable farmers. Arrangements are being made for Jos Native Authority to assume responsibility for this scheme and other smaller ones.

At Bokkos in Pankshin Division the conservation and drainage work carried out in the previous season was successful. Twenty more acres of stylosanthes and 20,000 eucalyptus trees were planted. Work at Langtang in Lowland Division consisted of repairs and communal bunding in areas previously marked out. A total of 343 acres was completed. Work on Dadur phase II and III was postponed for lack of capable officer.

42. *Sokoto Province.*—Work continued on soil and water conservation at various places in the Province. Another dam was constructed at Denge bringing the total to three. Sixty acres of land was protected with graded terraces and proper aligning of water courses. 30,000 trees were also planted. At Maru water-courses were repaired and 7,000 trees planted to check erosion. 30,000 trees were planted at Maramaru and existing terraces repaired. At Dingyadi foot hills 16,000 trees were planted. Thirty-two acres were terraced above the Gwandu Rice Scheme area and a cut-off drain was also constructed to collect run-off water and silt in order to free the rice fields from being silted up. Argungu and Sokoto Native Authorities were financially responsible for small conservation schemes at Biu and Kwasare, respectively, but little progress has been made in each case.

43. *Bauchi Province.*—At Malam Sidi soil conservation and Farm Improvement Scheme, a bush fire burned the grasses over a large part of the farming-free areas. Although farmers were persuaded not to cultivate the surrounding land there was considerable soil wash with the early rains which served to demonstrate to the District Council and the farmers the advantages of the grass strips. 7,500 economic trees and forty bags of gamba and kyasuwa seed were planted on the pegged strips and establishment was satisfactory for grasses but poor for trees.

Land Settlement Schemes

44. At the Shendam Resettlement Scheme the total population was 12,169 comprising 1,962 settlers and their households. Acreage under cultivation for both food and cash crops was slightly increased but that for cotton went down chiefly due to excessive vegetative growth and the resultant pests and diseases.

45. At the Gwoza Resettlement Scheme the number of settlers increased to 1,052 during the year.

46. At both Shendam and Gwoza schemes the Ministry continued to provide basic amenities as part of the responsibilities inherited when the schemes were taken over from the Northern Nigeria Development Corporation in 1962.

Locust Control

47. Tree locusts were reported in parts of Sokoto, Katsina, Zaria, Kano and Bauchi Provinces. Provincial staff were alerted to the possible invasion of desert locusts, and stocks of insecticides and baiting materials were checked and re-inforced. Fortunately they were not required.

Bee-Keeping

48. Attention was concentrated on demonstrating proven bee-keeping methods to farmers, other interested individuals and youth organisations. Sites were selected and bees were installed for demonstration purposes in Ilorin, Niger, Sokoto, Zaria, Katsina and Kano Provinces. These demonstrations are to be extended to the remaining Provinces. Research into the breeding of bees continued at Maigana near Zaria.

Agricultural Shows

49. Fifty-four Agricultural Shows were held in the Region during the year. As usual, these were organised and financed by Native Authorities in co-operation with Ministry staff. In general the shows were very successful as farmers had responded well to extension propaganda and the quality of produce, animals and items of handicraft exhibited was good. At all the shows the Ministry exhibited fertilisers, insecticides, seed dressings, fruit trees, agricultural implements, poultry and livestock. Co-operation from other Ministries and interested commercial firms was clearly shown by offers of prizes and participation in the exhibitions.

Agricultural Surveys

50. The Crop Production Trend Survey continued throughout the Region. This is an annual exercise carried out by the field staff of the Ministry and those of Native Authorities on behalf of the Federal Department of Statistics.

51. The Socio-Economic Survey of peasant agriculture which started at Makarfi (Zaria Province) in 1962 under the auspices of the United Nations Food and Agriculture Organisation continued in 1963 in Gombe and Hadejia. The survey was staffed by a Home Economist, an Agricultural Economist and an Extension Specialist. Much useful information has so far been collected and it is proposed to extend the survey to cover other ecological and cultural zones of the Region.

IRRIGATION DIVISION

Staff

52. The senior staff position improved considerably, ten more Irrigation and Hydrological Engineers being recruited in the year: the Division however continued to experience a deficiency of experienced technical staff at the sub professional level. In order to improve this situation an Irrigation School at Sokoto was started for the training of Technical Assistants Grade II. Eight Trainees were admitted to the School and they completed one year of the two years course. The intake of Kaduna Technical Institute was also raised for the Assistant Technical Officer-in-Training course. Five Assistant Technical Officers are undergoing their final year course at the Institute and another seven are in their first year. As the course at the Institute lacks facilities in the teaching of Irrigation and Hydrology subjects, special courses in Irrigation Engineering will be provided at Sokoto School. The problem is also aggravated by the difficulty of recruiting or holding suitably qualified students.

Foreign Assistance

53. Agreements concluded in the previous years with the USAID for the supply of equipment, commodities and personnel started to yield results. The USAID Soil Surveyors commenced work in Bornu Province on soil sampling of Yobe and South Chad Irrigation schemes. The Water Resources Engineer continued his preliminary studies on the Water storage schemes on the Kano and Challowa Rivers. The construction of a Hydrological Laboratory in Kaduna at an estimated cost of £4,000 was completed with USAID funds. The F.A.O. Agricultural Mission which arrived in 1962/63 completed its studies of water resources of the Region, with the co-operation of the Ministry.

Sokoto Rima Valley Investigations

54. F.A.O. worked to its maximum capacity on the Investigations of the Rima-Sokoto Valley Project with a full compliment of personnel and equipment. The plan of operation was amended as a result of revision in the topographic work of the Fadama Lands to be carried out by a task force instead of a contracting firm. By the end of March, 1964 the Soil Laboratory at Samaru had started work on the chemical analysis of soil and water samples received from the field whilst Government counterpart personnel to the Soil Scientist and junior staff to run the laboratory were appointed. A Contour Survey of the Fadama lands was undertaken from Sabon Birni to Wamako whilst contour maps for two alternative reservoir

sites at Gusau, and field operations for Talata Mafara, Kaura Namoda and Zurmi Dam sites were completed. Discharge measurements, sediment, and water sampling, rating curves, water management studies, and climatological station observations continued. An additional 25 per cent work was completed raising the total Hydrological work done to date to 50 per cent. Filed work on a semi detailed soil survey of the Fadama lands continued and 60 per cent of the total work was completed. The soil maps were prepared for 30 per cent of the total area under investigation. A reconnaissance soil survey of the Rima-Sokoto Valley was also started and 10 per cent of this was completed. Land use and erosion studies were also undertaken, and detailed flood control studies and protection of lands were carried out. Total expenditure incurred by Government during the year as counterpart contribution in kind came to £61,000.

Zamfara Valley Investigation

55. Under the United Nations Extended Programme of Technical Assistance, a team consisting of an Engineer, Soil Surveyor and an Engineering Surveyor arrived and commenced work on the investigation of Irrigation schemes in the Zamfara River valley. By end of March, 1964, this team had rounded off its work.

56. *Bornu Province.*—Areas cultivated and actually sown with wheat, rice and other crops under irrigation are shown in the following table:—

1	2	3	4	5
Name of Scheme	*Area planned for Development*	*Area cultivated*	*Area sown and irrigated, including rice and other crops*	*Installed capacity of Pumps*
Yobe irrigation Schemes ...				
1. Yau	420	415	415 (65)	One pump of 10.0 cusecs, One of 5 cusecs.
2. Daya ...	522	562	562 (40)	One Pump of 10 cusecs, one of 5 cusecs, and two of 2.5 cusecs.
South Chad Irrigation Scheme				
1. Tunokalia ...	100	12	12 (2)	One pump of 1.5 cusecs.
2. Gambaru ...	100	45	45 (10)	Two pumps of 1.5 cusecs.
Total ...	1,142	1,034	1,034 (117)	

57. Waters of the Yobe river as well as of the Ebeji river have been tested periodically and the water quality is first class.

58. Soil survey work in the Abadam and Arege areas of the Yobe schemes, a few miles from the existing Yau area, was commenced with the assistance of a U.S.A.I.D. soil technician to determine suitable lands for irrigation. 200 soil samples were taken in the field and analysed at the F.A.O. Soil Laboratory at Samaru. Saturation extracts of these samples, E.S.R. and conductivity tests were also done at the Soil Laboratory, Kano and results compared with the 10 per cent saturation extract. These results have enabled the Irrigation Engineer to avoid more hazardous areas.

59. Salinity and other soil deficiencies are reported on both the Yobe schemes and the South Chad Schemes. On the latter scheme also U.S.A.I.D. technician will be available for selecting soils of better capabilities. A field soil laboratory is to be set up at Gambaru for convenience.

60. Field trials are being carried out on the frequency of irrigation and the water requirements of crops. Some experiments on water requirements were started on an ad hoc basis but these are not correlated with the range of available moisture in the soils and the efficiency of various soils have yet to be determined. Records of salinity status during and after each crop under irrigation are also being organised.

61. A Seven to ten days watering schedule has been organised. By and large, farmers are co-operative. Experience gained here will be the guide for framing Irrigation Laws and Rules.

South Chad Irrigation Scheme

62. Two pilot irrigation schemes each of 100 acres were started at Gambaru and Tunakalia to provide basic information for future expansion to about 10,000 acres as provided in the development plan. The levee soils at Tunokalia require extensive land levelling and the extreme variation of soils within small areas call for a cautious approach. The early response at Gambaru is encouraging.

Hydrological Investigation

63. The existing hydrological stations where measurements were carried out during the year under report are listed below;—

S. No.	Name A		Location	Station	Discharge measurement Station	W. Level Station	W. Level & Discharge measurement Station	Chemical Water Sampling Station
	River	Lake						
1.	X	Lake Chad	Wulgo	601	X	W. Level	X. Level	Water Sampling
2.	X	ditto	Kerenowa	603	X	W. Level	X	ditto
3.	X	ditto	M/Fatori	608	X	W. Level	X	X
4.	K. Yobe	X	Yau	6101	X	X	W. Level and Discharge	Water Sampling
5.	Yobe	X	Daya		Discharge	X	X	—
6.	Yobe	X	Yawakura	Ty	X	W. Level	X	—
7.	Yobe	X	Mallam Ndi Jajawa	—	X	W. Level	X	—
8.	K. Yobe	X	Gashagar	6102	X	X	W. Level Discharge	Water Sampling
9.	ditto	X	Damasak	6103	X	X	ditto	ditto
10.	ditto	X	Geidam	6104	X	X	ditto	ditto
11.	ditto	X	Gashua	6105			ditto	ditto
12.	Ngadda	X	Maiduguri	6229	X	W. Level Discharge	ditto	ditto
13.	ditto	X	below Junction of river Ngel-Kodingel	Ty	X	W. Level	X	—
14.	Ngelko Dinigel	X	near Junction with Ngadda	Ty	X	W. Level	X	—
15.	X	Lake Alau	Logojere	6231	X	W. Level	X	—
16.	X	ditto	Allau Village	6232	X	W. Level	X	—
17.	Yadesram	X	Bama	6245	X	X	W. Level and Discharge	Water Sampling
18.	Ebeji	X	Gambaru	6261	X	X	ditto	ditto
19.	Ebeji	X	Tunakalia	Ty	X	W. Level	X	—

64. Joint measurements of Komadugu Yobe river flows were carried out by the Hydrologists from Niger Republic and Irrigation Engineer Yau at six hydrological stations in Nigeria—Yau, Gashaghar, Damasak and in Niger—Gueskerou, Africa and Bagara.

65. *Kano Province.*—Areas cultivated and actually sown with wheat on various Irrigation schemes are shown in the following table.

Name of Scheme	Area in acres—1963-64			Installed Capacity of Pumps
	Area planned for Irrigation	Cultivated	Actually sown and Irrigated	
Jekarade	130	75	61	4.0 cusecs
Tashena	110	55	20	3.65 cusecs
Agubu	50	50	38	2.15 cusecs
Mai-Alkama	240	240	165	11.8 cusecs
Ganurkuka	110	110	82	4.75 cusecs
Arewa	150	75	60	3.0 cusecs
Total	790	605	426	29.35 cusecs

Soil Laboratory

66. The construction of a soil Laboratory at Kano was started to cater for the needs of the Ministry in respect of soil studies.

Hydrology

67. Water level gauges, Discharge measurements and water samples were taken at the following Hydrological Stations:

Name of River	*Water Level Station*	*Discharge Measurement Station*	*Water Sampling Station*	*Hydrological Station No.*
Hadejia ...	Hadejia	Hadejia	Hadejia	6106
Challowa ...	Wudil	Wudil	Wudil	6109
Challowa ...	Railway Bridge	Railway B	Railway Bridge	6151
K. Gana ...	Dapehi	Dapehi	Dapehi	6113
Misau ...	Kari	Kari	Kari	6115
Iggi	Iggi Bridge	Iggi Bridge	Iggi	6123
Dogwala ...	Birnin Kudu	B/Kudu	Birnin Kudu	6125
Jemar	Foggo	Foggo	Foggo	6127
Bunga	Bunga	Bunga	Bunga	6128
Gaya	Chai-Chai	Chai-Chai	Chai-Chai	6133
Gaya	Gaya Bridge	Gaya B.	Gaya	6136
Kano ...	K-Z-Road B	K-Z-Rd B.	—	6144
Kano	Tamburawa	Tamburawa	—	6141
Watari ...	Gwarzo	—	—	6156
Watari ...	Dawakin Tofa	—	Dawakin Tofa	6158
Jakara ...	Sugungun	—	—	6162
Jakara ...	Gezawa Bridge	—	—	6165
Jakara ...	Kano Airport R.B.	—	—	6168
Tomas ..	Baba Ruga	Baba Ruga	Baba Ruga	6175
Gari	Jakrade B.	Jakrade B.	Jakrade Bridge	6176
Gari	Dank wai Lake	—	—	6177
Tatsawarki ...				

68. Gauges were regularly read at these Stations. The discharge measurements due to lack of professional supervision and experienced technical assistants needed further improvement. Five Technical Assistants were recruited and given training in Hydrological work, to take over independent work of discharge measurements.

69. *Niger and Ilorin Provinces.*—Desilting of main canals and general maintenance was carried out on Wuya, Edozhigi, Baddegi, Loguma and Edo Irrigation Schemes. In addition, some repairs to falls and reventments of the Edo and Wuya Edozhigi schemes respectively were carried out. The rate of irrigation development of the remaining areas on these schemes by the Native Authority was slow, and efforts are being made to accelerate extension of irrigation.

Duku Irrigation Scheme Extension

70. Main Canal was completed, with two drops and outlets, survey and design of field channels for the extension area was undertaken.

Hydrology

71. Rainfall measurements were taken at Bida Office, Baddegi H/W., Edozhigi, Wuya, Baddegi Railway Station, Guzan, Tungan Kawo, Kupanko, Bakoji Railway Station, Loguma and Baddegi Federal Research Station.

Hydrological Stations

72. Water level gauges, Discharge measurements, and water samples were taken at the following Hydrological Stations.

Name of River	*Water Level Station*	*Discharge Measurement Station*	*Water Sampling Station*	*Hydrological Station No.*
Gbako	Baddegi	Badeggi	Badeggi	1193
Bakogi	Bakogi	Bakogi	Bakogi	1162
Kampe	Rodun	Rodun	—	1153
Eche	Ece Bridge	Ece Bridge	—	1303
Kuyi	Kuyi Bridge	Kuyi Bridge	—	1313
Duku	Lade	Lade	Lade	1323
Oro	Lafiagi	Lafiagi	Lafiagi	1333
Yiko	Guzan	Guzan	Guzan	1367
Oshin	Bode Sadu	Bode Sadu	Bode Sadu	1353
Oyi	Share	Share	—	1343
Niger	Baradogi	—	—	105
Kaduna	Wuya	—	Wuya	301

73. Evaporation Measurements at Baddeggi Federal Rice Research Station were continued.

Minor Irrigation Schemes—Sokoto

74. The areas cultivated and actually sown with wheat on various Irrigation Schemes are shown in the following table:

Name of Scheme	*Area in Acres* 1963-64		*Installed Capacity of Pumps*
	Cultivated	*Actually Sown*	
Taloka	118	85	3 cusecs
Shinaka	55	35	1.5 cusecs
Kwakwazo	120	62	3.75 cusecs
Wurno	124	45	3.8 cusecs
Gidan Mustafa	84	20	3.0 cusecs
Marabawa	44	23	1.5 cusecs
Sokoto	34	—	0.75 cusecs
Silame	85	15	2.25 cusecs
Raha	50	40	1.5 cusecs
Argungu	10	10	0.75 cusecs
Tungan Tudu	10	10	0.5 cusecs
Total	734	345	22.3

75. Pilot Irrigation Scheme at Tungan Tudu gave good results and its extension was undertaken during the year.

Wurno Irrigation Scheme

76. Tender documents for the work of "Reconstruction and Completion of Wurno Irrigation Scheme" were prepared and issued to prequalified Contractors. The contract was awarded at a cost of £146,000 by the Northern Nigeria Tenders Board. The Contractor commenced work during March, 1964.

TRAINING AND EDUCATION DIVISION

School of Agriculture, Samaru

77. The School continued to provide the following courses—

Assistant Agricultural Superintendent ... ... (1 year)
Assistant Agricultural Superintendent (Mechanical) ... (2 years)
Agricultural Assistant ... ... (2 years)

In addition a two year Home Economics course for women was instituted. This course which will train Agricultural Homes Agents is intended as the women's equivalent of the Agricultural Assistant course and included in it is the teaching of rural domestic economy and home crafts.

78. Results of January to December Session 1963—

Course	*No. at beginning*	*No. at end*	*No. passed*	*Remarks*
Assistant Agricultural Superintendent ...	21	21	21	Includes 1 Gambian and 2 Native Authority students
Assistant Agricultural Superintendent (Mech.)	7	6	6	1 student died on course
Agricultural Assistant ...	47	42 (7 Native Authority)	42	3 students went to Denmark and 2 to U.S.A.

79. Of the 42 Agricultural Assistant students who left 27 of them had had a course biased towards extension work, 13 a course biased to agricultural teaching and two students specialised in soil survey laboratory work. Three of the students proceeded straight from the course to Italy for special training in agricultural machinery.

80. Student Numbers, March, 1964—

Assistant Agricultural Superintendent	—	18	Includes 1 student from the Gambia
Assistant Agricultural Superintendent (Mechanical)	2nd Year	21	
Assistant Agricultural Superintendent (Mechanical)	1st Year	10	
Agricultural Assistant	2nd Year	55	Includes 2 students from the Gambia
Agricultural Assistant	1st Year	98	Includes 1 student from the Gambia
Agricultural Assistant (Home Economics)	1st Year	18	

81. Of the 55 second year Agricultural Assistant students left at the School 28 were to go to Kabba as a ready made second year class but in actual fact they stayed on at Samaru as Kabba did not open in time.

OTHER COURSES

In May 1963 there was a 10 day Young Farmers Club course for 42 people.

In July 1963 there was a one month Nursery Demonstrator's course for 26 people (14 Government and 12 Native Authority).

During 1963 the Farm Machinery Section gave tractor driving courses of various grades to more than 60 candidates.

During the year one additional U.S.A.I.D. Agricultural Adviser and a U.S.A.I.D. Adviser in Home Economics were posted to the School.

Kabba School

83. The buildings were not handed over by the end of the year but work had progressed very rapidly and arrangements were made to take in the first students in May, 1964.

Farm Training Centres

84. One additional Farm Training Centre was completed at Zonkwa in Zaria Province bringing the total up to 9. Student numbers and examination results are given in the following table:

Farm Training Centre	*No. Sat*	*No. Passed*
Bauchi	16	13
Benue	22	19
Bornu	15	14
Ilorin	16	16
Kano	15	15
Katsina	14	11
Niger	16	16
Sokoto	14	14
Zaria	16	16

A Farm Institute student spraying cotton which has been planted in mid-June and received fertilizers

Farmers at Tungan Tudu Wheat Irrigation Scheme

A Home Economics student learning how to drive a tractor

Home Economics students in a cookery class

Farm Institutes

85. Work on the implementation of the plan to establish a Farm Institute in every Division of the Region, to give training courses to Primary School leavers was begun in 1963-64 but none of the Institutes were completed before the end of the year owing mainly to difficulties in reaching agreement on the design and construction for which Technical Assistance was being provided.

Irrigation School

86. Two-year training courses for Technical Assistants in the Irrigation Division were started at the Irrigation School, Sokoto. Ten students entered the first-year course. The School is a new enterprise at present housed in temporary accommodation.

PRODUCE INSPECTION DIVISION

87. The staff position in respect of Northern Nigerians improved considerably. Malam M. M. Isma taking control of the Division for the first time in April, 1963; by the end of the year, this post and the posts of one Senior Produce Officer, the Senior Pest Control Officer and four Produce Officers were held by Northerners out of a total of thirteen substantive staff. The general staff position in the more senior grades is still acute however, particularly in the Produce Officer and Assistant Produce Officer ranks, where suitably qualified staff seem almost impossible to obtain. The position has not been eased by the inclusion of five more new crops for inspection and grading in the past year.

Administration

88. A new Produce Inspection area has been formed with a base at Makurdi. This is an addition to the existing seven based on Kano, Zaria, Gusau, Gombe, Maiduguri, Lokoja and Funtua; the new area will cover work mainly on benniseed, soya beans and cotton in Benue and Plateau Provinces. Responsibility for the Pest Control Unit based at Kano and the Strategic Grain Reserve continues.

Produce Inspection and Inspection Stations

89. There was a total of 554 Inspection stations in 1963-64, an increase of 55, mainly accounted for by the number of new crops inspected. Apart from the new crops, the Division had to deal with the second largest crop ever of groundnuts—approximately 775,000 tons and the third largest seed cotton crop—129,000 tons. The other crops handled were: Capsicums, Palm Kernels, Palm Oil, Cocoa, Benniseed, Soya Beans, and under voluntary inspection schemes—Coffee, Castor Seed and Ginger.

Groundnuts

90. Of the total inspected no less than 150,000 tons were sub-grade—that is between 65 to 69 per cent whole nut content. Previously the tonnage has never exceeded 50,000 tons. The main reason appears to have been, first stricter control of grading standards, and second the lack of sufficient serviceable decorticating machines, leading to increased tonnages being decorticated by pestle and

mortar methods. This normally results in a whole nut content of less than 60 per cent. Consideration is being given to ways in which sufficient numbers of new decorticating machines can be made available. In many areas extraneous matter—principally stones—has continued to be a major problem, whilst in others the black or mouldy nut content has been unusually high, surprisingly in the areas of least rainfall. In both cases a great deal of refinement has been necessary to bring the crop to exportable standard.

Cotton

91. The shortage of experienced and responsible staff in the junior supervisory rank—Produce/Cotton Supervisor, has led to some unsatisfactory grading, and the amount of Grade I purchased increased, with a corresponding drop in Grade II. Considerable downgrading was therefore necessary at the Ginneries. The problem is becoming serious and it will be necessary to consider reorganising the system of cotton marketing and grading to prevent repetition of the factors that led to poor grading.

Benniseed

92. This crop, which has been inspected under a voluntary inspection scheme for several years, came under the Produce Inspection Laws and Regulations for the first time as a compulsory scheme in the 1963-64 season. The first year's control of this crop appears to have been very satisfactory and inspection and grading operated smoothly. No out-turn reports have yet been received, but it is confidently anticipated that they will show a considerable improvement over previous years.

Soyabeans

93. Soyabeans too, were inspected compulsorily for the first time during the past season. Unlike Benniseed there had been no voluntary inspection scheme previously and there was considerable opposition initially, particularly as all consignments have, by law, to be sieved, before being graded. As practically all soyabeans had a very high mineral matter content, the cost of seiving and the loss in weight sometimes as much as 4 or 5 per cent) meant quite a heavy financial loss to the Licensed Buying Agents concerned.

Ginger

94. This crop was inspected and graded by the Division many years ago, but the service ceased when world prices fell to an uneconomic level. With the better prospects, purchases were again made by the Northern Marketing Board during the season and this Division took over the responsibility for the marketing and inspection, on rather similar lines to that for cotton, the grading being done voluntarily. Three types of ginger are graded and purchased—peeled, split and rough-scraped. Marketing and grading went fairly smoothly and as can be seen from table 13, the first season has resulted in very substantial purchases being made; quality however has not been good and the main aim for future seasons must be a steady improvement in quality, especially of peeled ginger.

Tractor Hiring Unit at work: This is a common scene in the rainy season particularly in Sokoto, Katsina and Kano Provinces

Good benniseed farm in Gboko

Decorticating groundnuts on mats

Weighing groundnuts to determine percentage of quality

Robusta and Arabica Coffee

95. A total of 582 tons of robusta coffee was produced in Kabba Province and sold by the farmers through local business organisations to private Lagos concerns. This was due to the farmers' unwillingness to sell the coffee in 'Cherry' form accordance with the Northern Nigeria Marketing Board Coffee Marketing Scheme and the very much law price offered by the Board. 10 tons of Arabica Coffee was purchased and graded on the Mambilla Plateau.

Castor Seed

96. This commodity is principally marketed in Kabba Province. A total of 168 tons were purchased on behalf of the Board, the crop being inspected primarily for dryness and freedom from impurities, there being no prescribed standard. In view of its poisonous nature, and the subsequent danger if mixed with groundnuts, this Division is somewhat apprehensive about the development of this crop in areas mainly concerned with groundnut production.

Cocoa and Palm Produce

97. The inspection and grading of both crops has been carried out throughout the past year with generally satisfactory results and only at Idah was there minor difficulties over quality standards. For the second year in succession there has been no palm oil purchased and graded for export. All production appears to be absorbed by local requirements and by demand from private buyers in the Eastern Nigeria. The cocoa crop in the North continues to increase in size as the years go by and was a record 1,387 tons in 1963-64. Quality was well maintained and the small amount of down-grading necessary was due to deterioration through long storage.

Capsicums

98. The decline in the quantity of capsicums graded for export continues and during the 1963-64 season only some 42 tons were graded. There has probably not been any falling-off in production, but instead buyers (this crop does not come under the Northern Nigeria Marketing Board) prefer to have their capsicums inspected at port of shipment, as, if their produce is originally graded in the North, it has to be re-inspected again, if not shipped within two months of grading.

Pest Control Unit

99. The activities of the Unit have remained very similar to the previous year i.e. pest control measures in groundnuts and other stored produce, principally by fumigation. There is a great deal of scope for extension of this Unit and initiation of new methods of pest control; but without a trained, competent person to undertake development work, the present staff can do little more than carry out the routine techniques established in the past.

Regional Grain Reserve

100. This, as will be seen in table 14, has changed very little during the year. The small movements of grain that have taken place have been of wheat, issued to Native Authorities for seed. Some of the guinea corn has now been in stock for nearly four years and remains in excellent condition, although palatability will suffer if it is not disposed of and replaced with new stocks soon.

Publicity and Propaganda

101. This has been on a somewhat reduced scale, due to lack of staff, but the publicity stand visited a number of Agricultural shows in Zaria and Plateau Provinces during the season. A propaganda Team toured the Misau-Azare area of Bauchi Province, in an attempt to get farmers to improve their methods of decortication and preparation of groundnuts for sale and met with considerable success.

APPENDIX

PRODUCE INSPECTION DIVISION

Summary of Tables

Table

1 Table showing Provincial Distribution of all Gazetted and non-Gazetted Inspection Stations and Markets for 1963-64 Season with comparative Totals for 1962-63 Season.

2 Comparative Purchases of Groundnuts by Provinces. Graded (Exportable and Sub-Grade).

3 1963-64 Crop Groundnuts Tested and Graded by the Produce Inspection Division from 1-11-63 to 31-3-64.

4 Provincial Distribution of Seed Cotton Purchases for 1963-64 with comparative figures for 1962-63.

5 Seed Cotton Purchases (in Grades) Showing Percentages and Comparative Figures.

6 Purchases of Palm Kernels for 1963-64 with Comparative Figures for 1962-63.

7 Purchases of Cocoa for 1963-64 with Comparative Figures for 1962-63.

8 Castorseed Purchases 1963-64 Season.

9 Coffee Purchases 1963-64 Season.

10 Benniseed Purchases for 1963-64 Season.

11 Soya bean Purchases 1963-64 Season.

12 Capsicum Purchases 1963-64 Season with Comparative Figures for 1962-63 Season.

13 Ginger Purchases 1963-64 Season.

14 Grain Reserve Stock.

TABLE I—TABLE SHOWING PROVINCIAL DISTRIBUTION OF ALL GAZETTED AND NON-GAZETTED* INSPECTION STATIONS AND MARKETS FOR 1963-64 SEASON WITH COMPARATIVE TOTALS FOR 1962-63 SEASON

Crops	*Adamawa*	*Bauchi*	*Benue*	*Bornu*	*Ilorin*	*Kabba*	*Kano*	*Katsina*	*Niger*	*Plateau*	*Sardauna*	*Sokoto*	*Zaria*	*Total, 62-63*	*Total, 63-64*	*Increase*	*Decrease*
Groundnuts	—	4	1	14	1	—	23	11	4	2	—	7	3	70	70	—	—
Cotton ...	27	50	16	21	2	10	10	54	39	20	3	51	49	343	352	9	—
Capsicums ...	—	—	—	—	—	—	1	1	1	—	—	—	—	2	3	1	—
Cocoa ...	—	—	3	—	3	17	—	—	4	1	—	—	—	28	28	—	—
Palm Oil ...	—	—	3	—	3	17	—	—	4	1	—	—	—	28	28	—	—
Palm Kernels	—	—	3	—	3	17	—	—	4	1	—	—	—	28	28	—	—
Soya Beans ...	—	—	12	—	—	—	—	—	1	1	—	—	—	—	14	14	—
Benniseed ...	—	—	14	—	—	3	—	—	—	—	—	—	—	—	17	17	—
Ginger* ...	—	—	—	—	—	—	—	—	1	—	—	—	8	—	9	9	—
Castor Seed*	—	—	—	—	—	3	—	—	—	—	—	—	—	—	3	3	—
Coffee* ...	—	—	—	—	—	1	—	—	—	—	1	—	—	—	2	2	—
Total ...	27	54	52	35	12	68	34	66	58	26	4	58	60	499	554	55	—

N.B.—*Marked thus are voluntary inspection schemes run on behalf of Northern Nigeria Marketing Board.

TABLE 2—COMPARATIVE PURCHASES OF GROUNDNUTS BY PROVINCES GRADED (EXPORTABLE AND SUB-GRADE) IN TONS

Province	1963-64 (to 31–3–64)	1962-63 (to 31–3–63)	*Increase*	*Decrease*
Adamawa	—	—	—	—
Bauchi	32,542	34,708	—	2,166
Benue	2,172	408	1,764	—
Bornu	107,806	138,223	—	30,417
Ilorin	—	—	—	—
Kabba	—	—	—	—
Kano	381,270	411,742	—	30,472
Katsina	69,182	75,613	—	6,531
Niger	2,071	2,268	—	197
Plateau	4,178	6,610	—	2,432
Sardauna	—	7,866	—	7,866
Sokoto	89,087	99,825	—	10,738
Zaria	8,986	11,324	—	2,338
Total	697,294	788,587	—	91,393

TABLE 3—1963-64 CROP GROUNDNUTS TESTED AND GRADED BY THE PRODUCE INSPECTION DIVISION FROM 1–11–63 TO 31–3–64

Month	1963-64 EXPORTABLE	SUB-GRADE	*Grand Total*
November	53,820	8,566	62,386
December	174,576	39,834	314,410
January	189,986	45,642	235,628
February	87,557	18,827	106,384
March	59,112	20,292	79,404
Total	565,051	133,161	698,212

TABLE 4—PROVINCIAL DISTRIBUTION OF SEED COTTON PURCHASES FOR 1963-64 WITH COMPARATIVE FIGURES FOR 1962-63 (TO NEAREST TON)

Province	1963-64	1962-63	*Increase*	*Decrease*
Adamawa	4,015	6,880	—	2,865
Bauchi	20,634	20,634	—	332
Benue	1,042	2,117	—	1,075
Bornu	5,313	6,235	—	922
Ilorin	279	257	21	—
Kabba	703	1,045	—	342
Kano	3,455	3,403	52	—
Katsina	33,260	30,268	2,992	—
Niger	7,254	13,360	—	6,106
Plateau	6,070	7,438	—	1,368
Sardauna	1,155	837	318	—
Sokoto	26,218	31,285	—	5,067
Zaria	19,515	20,332	—	817
Total	128,581	144,091	3,384	18,894
Total Decrease ...				15,510

TABLE 5—SEED COTTON PURCHASES (IN GRADES) SHOWING PERCENTAGES AND COMPARATIVE FIGURES (IN TONS)

Crop Year	*Grade I*	*Grade II*	*Grade III*	*Total Purchases*	*Percentage of Total Purchases*		
					Grade I	*Grade II*	*Grade III*
1959-60	70,131	10,583	2,191	82,905	84%	13%	3%
1960-61	114,970	22,047	11,674	148,691	77%	15%	8%
1961-62	75,982	7,391	—	83,373	91%	9%	—
1962-63	130,305	13,785	—	144,091	90%	10%	—
1963-64	120,854	7,727	—	128,581	94%	6%	—

N.B.—These figures do not take into account downgradings after purchase.

TABLE 6—PURCHASES OF PALM KERNELS FOR 1963-64 WITH COMPARATIVE FIGURES FOR 1962-63 (IN TONS)

Month	1963-64	1962-63
April	1,433	1,477
May	2,645	2,268
June	3,041	2,268
August	2,103	1,476
September	1,582	1,170
October	1,740	1,002
November	999	981
December	820	567
January	530	489
February	1,111	553
March	1,771	993
Total	20,547	14,734

TABLE 7—PURCHASES OF COCOA FOR 1963-64 WITH COMPARATIVE FIGURES FOR 1962-63 (IN TONS)

Month	1963-64					1962-63				
	Main Crop Grade I	*Main Crop Grade II*	*Light Crop Grade I*	*Light Crop Grade II*	*Total*	*Main Crop Grade I*	*Main Crop Grade II*	*Light Crop Grade I*	*Light Crop Grade II*	*Total*
April	19	—	2	—	21	17	—	—	—	17
May	3	—	5	—	8	—	—	1	—	1
June	1	—	10	—	11	—	—	11	—	11
July	6	—	9	—	15	—	—	1	—	1
August	48	—	13	—	61	—	—	5	—	5
September ...	111	—	—	—	111	1	2	—	1	4
October	130	—	8	—	138	38	15	—	2	55
November	279	—	1	—	280	181	2	—	—	183
December	232	—	1	—	233	277	—	3	—	280
January	285	—	26	—	311	205	—	33	—	238
February	81	—	85	1	167	29	—	31	—	60
March	11	—	20	—	31	21	—	5	—	26
Total	1,206	—	180	1	1,387	769	19	90	3	881

TABLE 8—CASTORSEED PURCHASES 1963-64 SEASON (IN TONS)

Province	*Crop*	*Tons*
Kabba	Castorseed	168

TABLE 9—COFFEE PURCHASES 1963-64 SEASON (IN TONS)

Province	*Crop*	*Tons*
Kabba	Coffee	852

TABLE 10—BENNISEED PURCHASES FOR 1963-64 SEASON (IN TONS)

Month	*Purchases*
April	—
May	—
June	—
July	244
August	9,105
September	6,782
October	1,819
November	551
December	355
January	402
February	87
March	70
Total	19,415

TABLE 11—SOYA BEAN PURCHASES 1963-64 SEASON (IN TONS)

Month	*Purchases*
December	86
January	4,684
February	4,286
March	1,096
Total	10,152

TABLE 12—CAPSICUM PURCHASES 1963-64 SEASON WITH COMPARATIVE FIGURES FOR 1962-63 SEASON (IN TONS)

Station	*Purchases*	
	1963-64	1962-63
Kano	—	6
Funtua	42	267
Total	42	273

TABLE 13—GINGER PURCHASES 1963-64 SEASON (IN BAGS)

Area	*Province*	*Purchases*			
		Split	*Peeled*	*Scraped*	*Total*
Zaria	Zaria	62,733	9,608	146	72,487
	Niger	647	—	2	649
Total ...		63,380	9,608	148	73,136

N.B. 20 bags=1 ton. Total Tonnage=3,657 tons.

TABLE 14—GRAIN RESERVE STOCK (IN TONS)

Grains	*Quantity as at* 1-4-63	*Quantity as at* 31-3-64
Guineacorn	655	3,047
Wheat	197	298
Rice	10	220
Total	862	3,565

PRINTED AND PUBLISHED BY THE GOVERNMENT PRINTER
KADUNA, NORTHERN NIGERIA
1965

To be purchased from
Ministry of Internal Affairs
Printing Division
Kaduna

PRICE: TWO SHILLINGS AND SIXPENCE

GPK 2079/765/2,000